The Office Action dated July 17, 2002, rejected claims 1 through 4, and 10 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,072,251 to Markle ("the Markle patent") in view of U.S. Patent No. 5,831,352 to Takei ("the Takei patent"). Further, the Action rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over the Markle patent and the Takei patent in view of U.S. Patent No. 4,763,051 to Ruppert ("the Ruppert patent"). Moreover, the Action deemed claims 5 through 9 allowable if rewritten in independent form.

A rejection under 35 U.S.C. §103 requires that the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. All of the claim limitations must be taught or suggested by the prior art. M.P.E.P. §2143.03. Significantly, the prior art itself must suggest the modification or provide the reason or motivation for making such modification. In re Laskowski, 871 F.2d 115, 117, 10 USPQ 2d 1397, 1398-1399 (CAFC, 1989). "The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made." Sensonics Inc. v. Aerosonic Corp., 38 USPQ 2d 1551, 1554 (CAFC, 1996), citing Interconnect Planning Corp. v. Feil, 774 F. 2d 1132, 1138, 227 USPQ 543, 547 (CAFC, 1985). Additionally, if an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. M.P.E.P. §2143.03.

It is respectfully submitted that present claim 1 is patentable over each the Markle patent and the Takei patent, and that claim 1 defines an invention that is neither disclosed nor

suggested by either reference, or the cited combination thereof.

The Markle patent, as stated in the Action, clearly fails to disclose or suggest providing a displacement device with a number of sensors sensitive to magnetic fields, which sensors supply a signal which is dependent on the local mutual positions of said magnets of said first part relative to said electric coils of said second part in a region where these two parts overlap.

It is respectfully submitted that one of ordinary skill in the art would not have combined the teachings of the Markle patent with those of the Takei patent. There is no need, as suggested by the Action, to modify the apparatus for magnetically positioning a movable X-Y stage of the Markle patent by adding the Hall elements (43) of the Takei patent, at least because the purposes of the apparatus disclosed in the Markle patent (e.g., provide a new configuration of magnets and coils that leads to a more compact and energy efficient X-Y stage), are not furthered by having Hall elements (43) as defined by the Takei patent. Thus, the cited references notably fail to suggest the combination or provide a reason or motivation for making such combination.

It is further noted that nothing in the Markle patent teaches or suggests combining the Hall elements (43) as defined by the Takei patent with the apparatus for magnetically positioning a movable X-Y stage of the Markle patent. Moreover, the aim of the invention defined by claim 1, which is to provide accurate local position information immediately upon starting, is not facilitated by the movable table detecting arrangement disclosed in the Takei patent.

In addition, the Takei patent fails to disclose and/or suggest the sensors defined by claim 1. The Takei patent reads on a direct current linear motor having, as suggested by the Action, Hall effect elements 43a ($43a_1$ through $43a_n$) and 43b ($43b_1$ through $43b_n$) corresponding to each of a number of armature coils (22). These Hall elements (43) supply power to armature coils (22) for detecting a first movable table (2_1) and a second movable table (2_2), and for driving the tables. (col. 6, lines 31-36). Further, the Takei patent suggests that a field magnet (69) of first movable table (2_1) and second movable table (2_2) be arranged so that it is shifted by a prescribed width so that Hall elements (43) are not simultaneously detected. (col. 6, lines 53-56). Thus, the Takei patent distinctly teaches that a first position detection device be situated so that only the magnetic poles of a field magnet (69) of a first movable table (2_1) is detected, and that a second position detection device be situated so that only the magnetic poles of a second field magnet (69) of a second movable table (2_2) is detected. (col. 3, lines 54-67 and col. 4, lines 1-3) (Figs. 3 through 5).

In contrast, the invention defined by claim 1 requires that a signal be dependent on the local mutual positions of magnets of a first part relative to electric coils of a second part in a region where these two parts overlap. Hence, all of the claim limitations are not taught or suggested by the cited references.

Thus, it is respectfully submitted, at least for the foregoing reasons, that claim 1 is patentable over each of cited references and/or the cited combination thereof. Accordingly, reconsideration and withdrawal of the rejection, and allowance of claim 1, are respectfully requested.

Claims 2 through 11, which depend either directly or indirectly from claim 1, are patentable at least for the reasons stated above with respect to claim 1. Accordingly, reconsideration and withdrawal of the rejection, and allowance of present claims 2 through 11, are respectfully requested.

Regarding specifically the rejection of claim 11 in further view of the Ruppert patent, claim 11 depends indirectly from claim 1 and is thus patentable over the cited combination of references at least for those reasons previously discussed.

Finally, it is respectfully submitted that newly added claims 12 through 17 have been added to overcome the objection relating to claims 5 through 9. These claims do not contain new subject matter and, as suggested by the Action, are patentable over the cited references.

In sum, it is respectfully submitted that the pending present claims are patentable over each cited reference and/or any combination thereof. Thus, this application is in condition for allowance. Accordingly, reconsideration and withdrawal of all rejections of the claims are respectfully requested.

Dated: 10/4/02

David L. Barnes, Agent
Registration No. 47,407
Attorney/Agent for Applicants
Ohlandt, Greeley, Ruggiero & Perle, LLP
One Landmark Square
Stamford, CT 06901-2682
Tel: (203) 327-4500
Fax: (203) 327-6401